JAVASCRIPT

* JavaScript is the programming language of HTML and the Web.
* Syntax:
  + JavaScript statements are separated by semicolons
  + JavaScript statements are composed of Values, Operators, Expressions, Keywords, and Comments
  + Fixed values are called Literals. Variable values are caller variables.
  + Variables are used to store data values.
    - Eg. var x;

x = 6;

* Operators:
  + + (addition)
  + – (subtraction)
  + \* (multiplication)
  + / (division)
  + = (assignment operator)
* Expressions:
  + Eg. 5 \* 10

x + 2

* Comments:
  + Code after double slashes**//** or between**/\***and**\*/** is treated as a**comment.**
  + Comments are ignored, and will not be executed
* Identifiers
  + Identifiers are names used to name variables.
  + The first character must be a letter, an underscore (\_), or a dollar sign ($).
* JavaScript is case sensitive
* When joining multiple words in JavaScript, the words are either separated by a dash (–) or an underscore (\_), or by using the Lower and Upper Camel Case Principle
  + Eg variable-name

variable\_name

Lower Camel Case

variableName

Upper Camel Case

VariableName

RESERVED WORDS IN JAVASCRIPT

* Reserved words cannot be used to name variables, labels, and function names.

|  |  |  |  |
| --- | --- | --- | --- |
| abstract | arguments | await | boolean |
| break | byte | case | catch |
| char | class | const | continue |
| debugger | default | delete | do |
| double | else | enum | eval |
| export | extends | false | final |
| finally | float | for | function |
| goto | if | implements | import |
| in | instanceof | int | interface |
| let | long | native | new |
| null | package | private | protected |
| public | return | short | static |
| super | switch | synchronized | this |
| throw | throws | transient | true |
| try | typeof | var | void |
| volatile | while | with | yield |

JAVA SCRIPT’S BUILT-IN OBJECTS, PROPERTIES, AND METHODS

|  |  |  |  |
| --- | --- | --- | --- |
| Array | Date | eval | function |
| hasOwnProperty | Infinity | isFinite | isNaN |
| isPrototypeOf | length | Math | NaN |
| name | Number | Object | protorype |
| String | toString | undefined | valueOf |

HTML EVENT HANDLERS

|  |  |  |  |
| --- | --- | --- | --- |
| onblur | onclick | onerror | onfocus |
| onkeydown | onkeypress | onkeyup | onmouseover |
| onload | onmouseup | onmousedown | onsubmit |

WHAT JAVASCRIPT CAN DO

* JavaScript can change HTML content by using .innerHTML or .outerHTML
  + Eg. document.getElementById(“idOfTag”).innerHTML = “Hello World”;

* JavaScript can change HTML Attributes by using the .style.[CSS tag]
  + document.getElementById(“idOfTag”).style.fontSize = “25px”;
* JavaScript can change HTML Styles (CSS)
* JavaScript can show/hide HTML Elements
  + document.getElementById("idOfTag").style.display = "none";
  + document.getElementById("idOfTag").style.display = "block";

HTML DOM

* With the object model, JavaScript gets all the power it needs to create dynamic HTML:
  + JavaScript can change all the HTML elements in the page
  + JavaScript can change all the HTML attributes in the page
  + JavaScript can change all the CSS styles in the page
  + JavaScript can remove existing HTML elements and attributes
  + JavaScript can add new HTML elements and attributes
  + JavaScript can react to all existing HTML events in the page
  + JavaScript can create new HTML events in the page

HTML DOM METHODS

* HTML DOM methods are actions you can perform (on HTML Elements).
* HTML DOM properties are values (of HTML Elements) that you can set or change.

HTML DOM DOCUMENT OBJECT

* The document object represents your web page.
* If you want to access any element in an HTML page, you always start with accessing the document object.
* Eg.

|  |  |
| --- | --- |
| METHOD | DESCRIPTION |
| document.getElementById(id) | Find an element by element id |
| document.getElementsByTagName(name) | Find elements by tag name |
| document.getElementsByClassName(name) | Find elements by class name |

ADDING/DELETING ELEMENTS

|  |  |
| --- | --- |
| METHOD | DESCRIPTION |
| document.createElement(element) | Create an HTML element |
| document.removeChild(element) | Remove an HTML element |
| document.appendChild(element) | Add an HTML element |
| document.replaceChild(element) | Replace an HTML element |
| document.write(text) | Write into the HTML output stream |

REFERENCES:

W3C. JAVASCRIPT. Retrieved from https://www.w3schools.com/js/js\_reserved.asp